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(FILE 'HOME' ENTERED AT 12:42:08 ON 28 NOV 2006)

FILE 'CAPLUS' ENTERED AT 12:42:18 ON 28 NOV 2006
              E EKMAN GUNVOR/IN,AU
L1            22 S E4-5
              E ORDEBERG BUNVOR/IN,AU
L2             1 S E5
              E MALMSTROM ANDERS/IN,AU
L3            38 S E2-5
L4            56 S L1 OR L2 OR L3
L5         15312 S CERVIX
L6         24212 S CERVICAL
L7         30985 S L5 OR L6
L8            24 S L4 AND L7
L9         15720 S GLYCOSAMINOGLYCAN
L10        30924 S ANTICOAGULANT
L11       587496 S SULFAT?
L12        48428 S HEPARIN
L13            8 S L8 AND (L9 OR L10 OR L11 OR L12)
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L13 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:532530 CAPLUS
DOCUMENT NUMBER: 139:79188
TITLE: Use of sulfated glycosaminoglycans for establishing effective labor in women
INVENTOR(S): Ekman-Ordeberg, Gunvor; Malmstrom, Anders
PATENT ASSIGNEE(S): Karolinska Innovations AB, Swed.
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003055499	A1	20030710	WO 2003-SE4	20030102
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
SE 2002000005	A	20030703	SE 2002-5	20020102
SE 521676	C2	20031125		
CA 2472093	AA	20030710	CA 2003-2472093	20030102
AU 2003201787	A1	20030715	AU 2003-201787	20030102
EP 1461049	A1	20040929	EP 2003-700633	20030102
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
NZ 533856	A	20041224	NZ 2003-533856	20030102
CN 1612741	A	20050504	CN 2003-801944	20030102
JP 2005513148	T2	20050512	JP 2003-556076	20030102
ZA 2004005015	A	20050624	ZA 2004-5015	20040624
US 2005075314	A1	20050407	US 2004-500284	20040701
NO 2004003190	A	20040726	NO 2004-3190	20040727
PRIORITY APPLN. INFO.:			SE 2002-5 A	20020102
			WO 2003-SE4 W	20030102

AB The invention discloses the use of sulfated glycosaminoglycans having an anticoagulant activity of 100 BP units/mg or less for the manufacture of a pharmaceutical preparation for prophylactic priming or curative treatment of the cervix and the myometrium for establishing effective labor in women.
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:209305 CAPLUS
DOCUMENT NUMBER: 120:209305
TITLE: Prostaglandin E2-induced ripening of the human cervix involves changes in proteoglycan metabolism
AUTHOR(S): Norman, Margareta; Ekman, Gunvor; Malmstroem, Anders
CORPORATE SOURCE: Dep. Obstetr. Gynecol., Karolinska Inst., Stockholm, Swed.
SOURCE: Obstetrics & Gynecology (New York, NY, United States) (1993), 82(6), 1013-20
CODEN: OBGNAS; ISSN: 0029-7844
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The authors studied how PGE2 induces cervical ripening in women. Cervical biopsies were obtained immediately postpartum from women successfully treated with PGE2 gel intracervically. Six specimens were incubated with [35S]sulfate and five were used to characterize the nonlabeled proteoglycan composition In sep. expts., biopsy specimens from three term pregnant women with unripe cervixes were incubated

with PGE2 in organ cultures. Proteoglycans were isolated and characterized using ion exchange and gel chromatog. and SDS-PAGE. During PGE2-induced cervical ripening, the synthesis of proteoglycans, especially a large chondroitin/dermatan sulfate proteoglycan and biglycan, increased 3-6-fold. This resulted in a net increase in the large proteoglycan in the PGE2-treated cervixes. In organ culture, on the contrary, incubation with PGE2 decreased the proteoglycan synthesis. Thus, PGE2-induced cervical ripening is accomplished by increased remodeling of the cervical connective tissue, involving changed proteoglycan metabolism and composition

L13 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:204565 CAPLUS
DOCUMENT NUMBER: 114:204565
TITLE: Proteoglycan metabolism in the connective tissue of pregnant and non-pregnant human cervix. An in vitro study
AUTHOR(S): Norman, Margareta; Ekman, Gunvor; Ulmsten, Ulf; Barchan, Karin; Malmstroem, Anders
CORPORATE SOURCE: Karolinska Inst., Danderyd Hosp., Danderyd, S-182 88, Swed.
SOURCE: Biochemical Journal (1991), 275(2), 515-20
CODEN: BIJOAK; ISSN: 0306-3275
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Profound changes occur in the cervix during pregnancy. In particular, the connective tissue is remodeled. To elucidate the mechanisms behind this process, the metabolism of cervical connective tissue was studied using tissue cultures. Cervical biopsies from nonpregnant and pregnant women were incubated with [35S] sulfate. The proteoglycans of the tissue specimens were purified by ion-exchange and gel chromatog. and characterized by SDS/PAGE and by enzymic degradation In the nonpregnant cervix, the incorporation of [35S]sulfate into the proteoglycans was linear for 48 h. During the 1st 6 h of incubation the accumulation of chiefly 1 small labeled proteoglycan composition of nonsubstituted with dermatan sulfate was recorded. This is in accordance with the known proteoglycan composition of nonpregnant cervical tissue. In addition, small amts. of 2 larger radioactive dermatan/chondroitin sulfate proteoglycans (apparent Mr values 220,000 and > 500,000) were recorded. After longer periods of incubation the proportion of heparan sulfate proteoglycans increased considerably. The pregnant tissue showed a clearly different composition of labeled proteoglycans. An increased accumulation of the 2 larger dermatan/chondroitin sulfate proteoglycans was seen in addition to the dominant small dermatan sulfate proteoglycan of the nonpregnant cervix. The rate of accumulation of these 2 proteoglycans was .apprx.3-fold higher in the pregnant tissue, whereas that of the small dermatan sulfate proteoglycan was only increased 2-fold. The fact that the concentration of proteoglycans in the pregnant cervix is .apprx.1/2 of that in the nonpregnant cervix indicates that the turnover of proteoglycans in pregnant cervical tissue is significantly increased. The major effect of this profound change of metabolism was a 50% decrease in proteoglycan content and a 2-fold increased proportion of a dermatan sulfate proteoglycan with an apparent Mr of 220,000.

L13 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1985:502461 CAPLUS
DOCUMENT NUMBER: 103:102461
TITLE: Proteoglycans from cultures of fibroblast from the human uterine cervix
AUTHOR(S): Uldbjerg, Niels; Malmstroem, Anders; Ekman, Gunvor; Ulmsten, Ulf
CORPORATE SOURCE: Dep. Pharmacol., Univ. Aarhus, Aarhus, Den.
SOURCE: Gynecologic and Obstetric Investigation (1985), 19(3), 146-54
CODEN: GOBIDS; ISSN: 0378-7346
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The synthesis and secretion of proteoglycans by human uterine cervical cells in culture were investigated by incubating the monolayer with 35SO42- and [3H]leucine for 48 h. Two dermatan

sulfate proteoglycans and 1 heparan sulfate proteoglycan were isolated from the medium. The cell layer contained the same proteoglycans, although in different proportions. The major dermatan sulfate proteoglycan, accounting for 55% of the total macromol. 35S, was small, with a mol. weight (MW) of 100,000 daltons. The side chains were calculated to be .apprx.1-3/protein core and included >50% iduronic acid-containing disaccharides. This small dermatan sulfate proteoglycan is very similar to that isolated from the intact human uterine cervix. However, when cells were established in culture, an addnl., larger dermatan sulfate proteoglycan with a MW of 400,000 daltons was synthesized. This proteoglycan contained 4-8 polysaccharide side chains rich in glucuronic acid and 24% of the total macromol. 35S.

L13 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1984:21040 CAPLUS
DOCUMENT NUMBER: 100:21040
TITLE: Ripening of the human uterine cervix related to changes in collagen, glycosaminoglycans, and collagenolytic activity
AUTHOR(S): Uldbjerg, Niels; Ekman, Gunvor; Malmstroem, Anders; Olsson, Kjell; Ulmsten, Ulf
CORPORATE SOURCE: Dep. Physiol. Chem., Univ. Lund, Lund, Swed.
SOURCE: American Journal of Obstetrics and Gynecology (1983), 147(6), 662-6
CODEN: AJOGAH; ISSN: 0002-9378
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Connective tissue in biopsy specimens taken from the lower part of the uterine cervix in pregnant women at various gestational ages was compared to that in similar specimens from nonpregnant women. The concns. of collagen, sulfated glycosaminoglycans, and hyaluronic acid decreased during pregnancy. At the gestational age of 10 wk, the collagen concentration was 70%, and at term 30%, of that in the nonpregnant cervix. After delivery, no further decrease was observed The extractability of collagen increased during pregnancy, as well as during labor. Also, the water concentration increased. An increase in the collagenolytic activity was observed with advancing gestational age. The collagenase activity and the concentration of leukocyte elastase increased gradually to 10-fold initial values. The physiol. importance of the collagen was also demonstrated, since the cervical dilatation time during spontaneous labor was longer in women with high concns. of collagen and shorter in women with low concns. of collagen.

L13 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1984:20837 CAPLUS
DOCUMENT NUMBER: 100:20837
TITLE: Dermatan sulfate and mucin glycopeptides from the human uterine cervix
AUTHOR(S): Uldbjerg, Niels; Carlstedt, Ingemar; Ekman, Gunvor; Malmstroem, Anders; Ulmsten, Ulf; Wingerup, Lars
CORPORATE SOURCE: Dep. Physiol. Chem., Univ. Lund, Lund, S-220 07, Swed.
SOURCE: Gynecologic and Obstetric Investigation (1983), 16(4), 199-209
CODEN: GOBIDS; ISSN: 0378-7346
DOCUMENT TYPE: Journal
LANGUAGE: English
AB High-mol.-weight glycopeptides and glycosaminoglycans were isolated from the human uterine cervix. The major part of the material (82%) was derived from cervical mucins. The remainder contained hyaluronic acid (3%), heparan sulfate (2%), and dermatan sulfate (13%). Chondroitin sulfate and keratan sulfate were not present, but chondroitin sulfate-like segments were included in the dermatan sulfate. The composition of the cervix apart from the mucus-filled crypts is similar to that of other fibrous connective tissues.

L13 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1983:571634 CAPLUS
DOCUMENT NUMBER: 99:171634
TITLE: Isolation and characterization of dermatan

sulfate proteoglycan from human uterine cervix

AUTHOR(S): Uldbjerg, Niels; Malmstroem, Anders; Ekman, Gunvor; Sheehan, John; Ulmsten, Ulf; Wingerup, Lars

CORPORATE SOURCE: Dep. Physiol. Chem., Univ. Lund, Lund, S-220 07, Swed.

SOURCE: Biochemical Journal (1983), 209(2), 497-503
CODEN: BIJOAK; ISSN: 0306-3275

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Proteoglycans extracted from human uterine cervix with 4M guanidinium chloride (I) in the presence of proteinase inhibitors were purified by d.-gradient centrifugation in 4M I/CsCl (starting d. = 1.32 g/mL) followed by DEAE-cellulose and Sepharose chromatog. Only 1 polydisperse proteoglycan was found. The sedimentation coefficient was 2.1 S and the weight-average mol. weight ranged from 73,000 (sedimentation-equilibrium centrifugation) to 100,500 (light-scattering). The core protein was monodisperse, with an apparent mol. weight of 47,000. The proteoglycan contained 30% protein and probably 2 or 3 glycosaminoglycan side-chains/mol. High contents of aspartate, glutamate, and leucine were present. The glycan moiety of the proteoglycan was exclusively dermatan sulfate, with a copolymeric structure with approx. equal quantities of iduronic acid- and glucuronic acid-containing disaccharides.

L13 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1983:417232 CAPLUS

DOCUMENT NUMBER: 99:17232

TITLE: Biochemical changes in human cervical connective tissue after local application of prostaglandin E2

AUTHOR(S): Uldbjerg, Niels; Ekman, Gunvor; Malmstroem, Anders; Ulmsten, Ulf; Wingerup, Lars

CORPORATE SOURCE: Malmoe Gen. Hosp., Univ. Lund, Lund, Swed.

SOURCE: Gynecologic and Obstetric Investigation (1983), 15(5), 291-9
CODEN: GOBIDS; ISSN: 0378-7346

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Intracervical administration of PGE2 (I) [363-24-6] in the late 1st trimester of pregnant women induced softening of the cervical tissue and had marked effects on the collagen and ground substance. I treatment decreased pepsin-extractable collagen levels and collagenase [9001-12-1] activity, increased sulfated glycosaminoglycan levels, but did notalter hyaluronic acid [9004-61-9] or water levels. Apparently, I induces ripening of the cervix in pregnancy by increasing collagenase activity and replacing collagen with sulfated glycosaminoglycans.